

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 70.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-005250**Date Inspected:** 27-Jan-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1740**Contractor:** Japan Steel Works**Location:** Muroran, Japan**CWI Name:** Je-An You**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower, Jacking and Deviation Saddles**Summary of Items Observed:**

The following report is based on METS observations at Japan Steel Works (JSW) in Muroran Japan. Current work: Casting, machining and nondestructive testing of Saddles.

Fabrication Shop 4**T1-2 Casting**

The QA inspector observed the continued casting repair welding on Tower Saddle casting T1-2. The welding was performed to build up the height of the ribs and stems in areas that were found to have excessive gap when fit to the fabricated base as shown on the approved drawings. The repair locations and repair details for this casting were submitted as Caltrans ABF-RFI-001453. The JSW welding personnel Daisuke Hirakawa, ID 08-3566 continued the welding of 8Y-12V. Kazuya Iwamoto, ID 07-4366 continued the welding of 8Y-10V. Tako Kawagishi, ID 08-5026 continued the welding of 8Y-7V. The repairs were performed utilizing Shielded Metal Arc Welding (SMAW) per the welding procedure specification (WPS) SJ 3012-1-2. Intertek Testing Services Quality Control (QC) inspector Mr. Je-An You monitored the welding parameters and heat control at periodic intervals. The work was not completed on this date and appeared to meet the minimum requirements of the welding procedure specification and contract documents.

W2W1 Base

The QA inspector observed JSW welding personnel, Kiyotaka Koyanzgi, ID 08-5144 continue welding temporary supports devices on rib plates in preparation for assembly of T1-3 Base. The Shielded Metal Arc Welding (SMAW) process was utilized.

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W2E2 Assembly

The QA inspector observed the continued welding of the West Deviation Saddle Base W2E3, rib plate weld. The welding was performed in between tack welds that had been welded and inspected visually and by magnetic particle examination previously. The JSW welding personnel Masao Yamashita, ID 73-4195 and Takatoshi Inoue, ID 08-5163 performed the welding utilizing the Shielded Metal Arc Welding (SMAW) process per the welding procedure specification (WPS) SJ-3011-4. Intertek Testing Services Quality Control (QC) inspector Mr. Je-An You monitored the welding parameters and heat control at periodic intervals. The work was not completed on this date and appeared to meet the minimum requirements of the welding procedure specification and contract documents.

W2E3 Base

The QA inspector observed the in process welding of the structural steel plates for the West Deviation Saddle Base W2E3. The JSW welding personnel Toshiyuki Watamichi, ID 08-5169 continued the fill welding of joints E2Y-9V and E2Y10V in the horizontal position. The welding was performed utilizing the gas shielded flux cored arc welding process per the welding procedure specification (WPS) SJ-3011-3. Intertek Testing Services Quality Control (QC) inspector Mr. You monitored the welding parameters and heat control at periodic intervals. The work was not completed on this date and appeared to meet the minimum requirements of the welding procedure specification and contract documents.

Casting Shop:

T1-3 Casting:

The QA inspector observed JSW welder Y. Kabutomori, ID 06-8000 continue the repair welding of repair 2-1 as shown on section B-B. The repair locations and repair details for this casting were submitted as number 000643, revision 06. The repair was performed utilizing Shielded Metal Arc Welding (SMAW) per the welding procedure specification (WPS) SJ 3026-4. The work was not completed on this date and appeared to meet the minimum requirements of the welding procedure specification and contract documents.

W2W1 Casting

The QA inspector observed the Nikko Inspection Services QC/NDT technician Mr. Harumi Kohama continue the shear wave ultrasonic testing of the casting exterior. The testing was performed with a 2 MHz, 8mm by 9mm square 45 degree shear wave transducer in accordance with JSW procedure specification number SJ-2878 revision 2. The testing was not completed on this date and the work appears to meet the minimum requirements of the contract specifications.

Summary of Conversations:

Mr. Kohama reported that straight beam ultrasonic testing was completed on W2W1 and no relevant indications were reported.

There were general conversations with Intertek Testing Services Certified Welding Inspector Mr. Je-An You relative to the location of the welding and inspection personnel in the fabrication shop number 4 and as noted above.

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Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy, (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Lanz,Joe	Quality Assurance Inspector
Reviewed By:	Mertz,Robert	QA Reviewer
